

Recent IBM Patents

The following patents were recently issued by the countries in which the inventions were made.

Canada

1,032,643 E. Lattiner Wire Wrap Board

Germany

2,002,708 K. Tertel and K. K. Najmann Method of and Arrangement for the Distribution of Timing
2,104,427 F. Tsui Data Storage Apparatus
2,204,349 L. Reichl Multiplexor

United Kingdom

1,499,268 W. J. Case Servo Apparatus

United States

4,084,117 S. M. Vogel and J. W. Woods Procedure for Tightening Tape Wraps on a Spindle
4,084,189 E. G.-H. Lean Acousto-Electric Scanner by Phonon Echo Phenomenon
4,084,191 E. G.-H. Lean Acousto-Optical Scanner
4,084,195 L. W. Pereira Image Data Remapping System
4,084,230 R. E. Matick Hybrid Semiconductor Memory With On-Chip Associative Page Addressing, Page Replacement and Control
4,084,231 A. J. Capozzi, V. A. Cordi and B. A. Edson System for Facilitating the Copying Back of Data in Disc and Tape Units of a Memory Hierarchical System
4,084,254 R. E. Birney, J. C. Leininger and G. P. Taylor Divider Using Carry Save Adder with Nonperforming Lookahead
4,084,258 R. G. Bluethman Apparatus for Performing Multiple Operations in a Shift Register Memory
4,084,354 J. Grandia and J. C. Hill Process for Slicing Boules of Single Crystal Material
4,084,897 C. A. Queener Half-Lens/Mirror Copier Providing Original-to-Copy Image Reduction
4,084,909 E. S. Mathisen Drum Monochromator
4,085,406 J. M. Schmidt and W. L. Snow Spiral Antenna Absorber System
4,085,445 M. M. Blevins and R. G. Bluethman Text Merge with Copies and Envelopes
4,085,448 P. M. Kogge Data Communication Bus Structure
4,085,454 D. M. Hannon Method and Apparatus for the Controlled Generation of Wall Encoded Magnetic Bubble Domains
4,085,498 V. L. Rideout Fabrication of Integrated Circuits Containing Enhancement-Mode FETs and Depletion-Mode FETs with Two Layers of Polycrystalline Silicon Utilizing Five Basic Pattern Delineating Steps
4,086,114 K. N. Karol Aluminum Surface Treatment to Enhance Adhesion in a Given Direction
4,086,447 H. R. Schindler and P. Vettiger Electronic Hybrid Circuit for Connecting a Two-Wire Line to Switching System
4,086,470 W. H. Ashbee Hardware-Software Counting
4,086,477 R. L. Cowardin and G. J. Laurer Decoding Method and Circuit
4,086,601 G. L. Fillmore, J. D. Hill, W. F. Robinson and T. H. Williams Sequential Ink Jet Printing System with Variable Number of Guard Drops
4,086,628 L. J. Woodrum Directory Generation System Having Efficiency Increase with Sorted Input
4,086,658 D. E. Finlay Input/Output and Diagnostic Arrangements for Programmable Machine Controllers Having Multiprogramming Capabilities
4,086,660 M. E. McBride Automatic Format Control for Text Printing System
4,086,870 B. J. Canavello, M. Hatzakis, A. R. Siegel and C. Watters Novel Resist Spinning Head
4,087,569 M. Hatzakis Prebaking Treatment for Resist Mask Composition and Mask Making Process Using Same
4,087,625 H. Dym and M. Krakinowski Capacitive Two Dimensional Tablet with Single Conductive Layer
4,087,685 H. A. Froot Fluorescent Microanalytical System and Method for Detecting and Identifying Organic Materials

4,087,747	A. W. Deegen and M. J. Kessler	Arrangement for Testing Electric Samples with a Plurality of Probe Contact Points
4,087,794	W. F. Beausoleil, P. P. Hennet, K. Maling and N. K. Powers	Multi-Level Storage Hierarchy Emulation Monitor
4,087,810	R. Y.-M. Hung and J. L. Levine	Membrane Deformographic Display, and Method of Making
4,087,811	A. Weinberger	Threshold Decoder
4,087,812	L. M. Terman	Digital-to-Analog and Analog-to-Digital Converter Circuit
4,087,825	W. H. Chen and S. C. Titcomb	Ink Jet Printing Intensity Modulation
4,087,832	C. G. Jambotkar	Two-Phase Charge Coupled Device Structure
4,087,843	H. P. Louis, A. Matla, K. H. Schaller and V. Zimmerman	Positioning Device for the Access Arm of the Magnetic Head of a Magnetic Disk Storage
4,087,856	C. R. Attanasio	Location Dependence for Assuring the Security of System-Control Operations
4,088,490	P. J. Duke, J. Leff, L. C. Licican and M. V. Powell	Single Level Masking Process with Two Positive Photoresist Layers
4,088,515	A. E. Blakeslee and J. W. Matthews	Method of Making Semiconductor Superlattices Free of Misfit Dislocations
4,088,833	D. N. Godard and A. T. Milewski	Carrier Detector
4,088,991	K. S. Sachar	Visual Display by Electric Control of Scattering of Light From a Beam Guided by an Elastomer Film
4,089,007	F. J. Perry and A. Vesci	Digital Flow Pressure Regulator
4,089,029	D. O. Castrodale, W. J. Pendy, Jr. and W. S. Wentink	Data Storage Apparatus Using a Flexible Magnetic Disk
4,089,061	A. T. Milewski	Method and Apparatus for Determining the Initial Values of the Coefficients of a Complex Transversal Equalizer
4,089,452	D. E. Houser and R. J. Morenus	Orientation Apparatus for Multiple Twisted Wires
4,089,516	D. F. Colglazier, J. L. Fallon, E. P. Kollar and F. R. Mares	Multibin, Cut-Sheet Xerographic Copier
4,089,712	R. C. Joy, I. E. Magdo and A. Phillips, Jr.	Epitaxial Process for the Fabrication of a Field Effect Transistor Having Improved Threshold Stability
4,089,766	G. Paal and K. Schackert	Method of Passivating and Planarizing a Metallization Pattern
4,089,857	E. M. Engler and R. R. Schumaker	Tetrathiapentalene and Tetraselenapentalene Compounds
4,089,992	V. Y. Doo, D. R. Nichols and G. A. Silvey	Method for Depositing Continuous Pinhole Free Silicon Nitride Films and Products Produced Thereby
4,090,006	J. Havas, J. S. Lechaton and S. Logan	Structure for Making Coplanar Layers of Thin Film
4,090,076	H. E. Hunziker and R. K. Nesbet	High Resolution Electron Energy Device and Method
4,090,174	D. C. Van Voorhis	Method and Apparatus for Accessing Horizontal Sequences, Vertical Sequences and Rectangular Subarrays from an Array Stored in a Modified Word Organized Random Access Memory System
4,090,249	T. C. Chen, C. Tung and V. Y. Lum	Apparatus for Sorting Records in Overlap Relation with Record Loading and Extraction
4,090,252	R. J. Braun	Rotational Field Generator for Bubble Memory Package
4,090,254	I. T. Ho and J. Riseman	Charge Injector Transistor Memory
4,090,255	H. H. Berger, K. Heuber, W. Klein, K. Najmann and S. Wiedmann	Circuit Arrangement for Operating a Semiconductor Memory System
4,090,289	R. H. Dennard and V. L. Rideout	Method of Fabrication for Field Effect Transistors (FETs) Having a Common Channel Stopper and FET Channel Doping with the Channel Stopper Doping Self-Aligned to the Dielectric Isolation Between FETs
4,090,782	K. E. Bredfeldt, R. B. Champ and K. J. Fowler	Electrochromic Display Devices Comprising Thienylidene Pyrazoline Compounds
4,090,787	J. H. Hubbard, R. J. Leclere and T. T. Underhill	Automatic Copier Mode Controls
4,091,169	A. Bohg, E. Ebert and E. Mirbach	Silicon Oxide/Silicon Nitride Mask with Improved Integrity for Semiconductor Fabrication
4,091,242	F. P. Carrubba, W. E. Daniels, Jr. and P. A. Franaszek	High Speed Voice Replay Via Digital Delta Modulation
4,091,305	N. M. Poley and M. B. Skolnik	Gas Panel Spacer Technology
4,091,331	H.-P. Kaser, P. Thirion and G. Ungerböck	Arrangement for Compensating Carrier Phase Errors in a Receiver for Discrete Data Values
4,091,390	N. C. Smith and T. Wilson III	Arrangement for Multi-Orifice Ink Jet Print Head
4,091,454	E. L. Kauffmann	Self-Centering Disk Having an Eccentric Elliptical-Shaped Center Locating Hole
4,091,978	J. E. Graham II	Sheet Handling Apparatus
4,092,061	D. J. Stigliani, Jr.	Side-Coupling of Light for an Optical Fiber
4,092,166	C. E. Olsen and L. J. Serpa	Double Exposure and Double Etch Technique for Producing Precision Parts from Crystallizable Photosensitive Glass
4,092,442	R. K. Agnihotri and H. C. Kluge II	Method of Depositing Thin Films Utilizing a Polyimide Mask
4,092,548	K. E. Beilstein, Jr. and H. N. Kotecha	Substrate Bias Modulation to Improve MOSFET Circuit Performance
4,092,551	D. D. Howard and H. Schettler	A.C. Powered Speed Up Circuit

4,092,553	F. F. Fang and D. J. Herrell	Josephson Logic Circuit Powering Arrangement
4,092,637	D. J. Barclay, C. L. Bird, M. H. Hallett, D. H. Kirkman, J. F. Minshull and C. E. Owen	Liquid Electrolyte Type Electrochromic Display Device
4,092,681	G. L. Dix, C. C. Hanson, R. C. Jahnke and F. K. King	Flexible Disk File Access Mechanism
4,092,697	R. N. Spaight	Heat Transfer Mechanism for Integrated Circuit Package
4,092,729	W. S. Rosenbaum and H. C. Tanner	Apparatus for Automatically Forming Hyphenated Words
4,092,732	N. K. Ouchi	System for Recovering Data Stored in Failed Memory Unit
4,093,056	G. Burgers	Single Revolution Mechanism
4,093,132	W. R. Christiana and J. F. Hevesi	Method of Winding a Magnetic Deflection Yoke
4,093,358	M. D. Shattuck and G. T. Sincerbox	High Efficiency Electrochromic Display Device
4,093,378	A. F. Horr and W. F. White	Alignment Apparatus
4,093,503	E. P. Harris and R. W. Keyes	Method for Fabricating Ultra-Narrow Metallic Lines
4,093,875	R. W. Knepper	Field Effect Transistor (FET) Circuit Utilizing Substrate Potential for Turning Off Depletion Mode Devices
4,093,912	G. P. Double, V. N. Kahwaty, J. D. Randall and F. M. Reinhart	NMR Magnet Assembly with Pole Face Parallelism Adjustment
4,093,982	D. A. Heuer, P. C. Schloss and L. L. Schroeder	Microprocessor System
4,093,983	C. R. Masog, J. U. Petrie and Y. Mishima	Fast and Normal Rate Instruction Fetching
4,093,987	C. H. Gaudette and R. C. Williams	Hardware Control Storage Area Protection Method and Means
4,093,994	H. J. Nussbaumer	Fast Discrete Transform Generator and Digital Filter Using Same
4,093,996	W. J. Hogan, A. A. Schwartz and J. R. Stewart	Cursor for an On-the-Fly Digital Television Display Having an Intermediate Buffer and a Refresh Buffer
4,094,057	A. Bhattacharyya and R. Silverman	Field Effect Transistor Lost Film Fabrication Process
4,094,397	F. M. Hughes	Typewriter Selection Drive Follower Block and Shuttle Assembly
4,094,461	R. M. Kellogg and A. P. Mulzet	Centrifuge Collecting Chamber
4,094,576	G. M. Heiling	Straight-Line Optical Scanner Using Rotating Holograms
4,095,066	R. H. Harris	Hinged Flyplate Actuator
4,095,126	C. R. Hoffman and W. B. Nunnery	Bi-Polar Amplifier with Sharply Defined Amplitude Limits
4,095,218	W. G. Crouse	Hybrid Pulse Width-Pulse Rate Digital-to-Analog Converter Method and Apparatus
4,095,251	R. H. Dennard and D. P. Spampinato	Field Effect Transistors and Fabrication of Integrated Circuits Containing the Transistors
4,095,265	R. A. Vrba	Memory Control Structure for a Pipelined Mini-Processor System
4,095,270	A. Blum, H. von der Heyden, F. Irro, G. Knauff, S. Richter and H. Schulze-Schoelling	Method of Implementing Manual Operations
4,095,277	R. G. Bluethman and W. W. Boyd	Method for Communicating Text Commands and Instructions Using Conventional Coded Text Characters and a Structure for Decoding and Presenting Command and Instruction Signals
4,095,283	J. E. Campbell and G. R. Thompson	First In-First Out Memory Array Containing Special Bits for Replacement Addressing